

the results, 100 mmol/L of hydrazine was added to reagent 1-D.

Discussion on Experiment 3 (Fig. 3)

Using a nonionic surfactant having an HLB value of 17.3, Nonion
5 K-230 (Nippon Oils & Fats Co., Ltd.), the effect of addition on
the HDL fraction was confirmed. The addition of nonionic surfactant
extremely decreased the reactivity of LPL with respect to the VLDL
and further strengthened the specific reactivity thereof with
respect to the HDL fraction. The effect for decreasing the reactivity
10 of LPL with the LDL fraction was also confirmed. Based on the results
0.6% of Nonion K-230 was added to the reagent 1-D.

Discussion on Experiment 4 (Fig. 4)

As a result of applying the respective means, i.e., Nonion
15 K-230, hydrazine and LPL in combination, a more perfect selective
reaction system for the HDL fraction was established.

CLAIMS (Amendment under Art. 34)

1. (After amendment) A method for assaying a specific component in a lipoprotein fraction in a serum by an enzymatic reaction, which
5 comprises introducing a controlling means which is established by selecting the enzymatic reaction, for enabling an enzymatic reaction preferentially with respect to an object component in the specific lipoprotein fraction without forming complexes nor aggregates, thereby specifically assaying the component.

10 2. A method for assaying a specific component in a lipoprotein fraction according to claim 1, wherein said controlling means is a means for controlling ionic strength of a reaction liquor so as to facilitate the enzymatic reaction of the target component in
15 the specific lipoprotein fraction in the reaction liquor.

3. A method for assaying a specific component in a lipoprotein fraction according to claim 2, wherein said controlling ionic strength increases the ionic strength of the reaction liquor to
20 a sufficiently high level so as to facilitate the enzymatic reaction of the component in a high-density lipoprotein (HDL) in the liquor.

4. A method for assaying a specific component in a lipoprotein fraction according to claim 1, wherein said controlling means is
25 a means for enabling the enzymatic reaction directly and/or preferentially with respect to the component in the specific

lipoprotein fraction in the reaction liquor, utilizing reaction specificity of an enzyme to the specific lipoprotein.

5. A method for assaying a specific component in a lipoprotein
5 fraction according to claim 4, wherein said means for enabling the enzymatic reaction directly and/or preferentially with respect to the component in the specific lipoprotein fraction is reacting lipoprotein lipase and/or cholesterol esterase that preferentially act(s) on the HDL fraction.

10 6. A method for assaying a specific component in a lipoprotein fraction according to claim 1, wherein said controlling means is a means for enabling the enzymatic reaction directly and/or preferentially with respect to the component in the specific
15 lipoprotein fraction in the reaction liquor, utilizing reaction selectivity of a selected nonionic surfactant to the specific lipoprotein.

7. A method for assaying a specific component in a lipoprotein
20 fraction according to claim 1, wherein a nonionic surfactant that has reaction selectivity to the HDL fraction and an HLB value of 16 or more is used as said nonionic surfactant, thereby enabling the enzymatic reaction directly and/or preferentially with respect to the component in the HDL fraction in the reaction solution.

25 8. The method for assaying a specific component in a lipoprotein